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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,746	11/17/2000	Kevin Lefebvre	10005273-1	6970

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EXAMINER	
QUILLEN, ALLEN E	
ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/715,746	LEFEBVRE ET AL.	
	Examiner	Art Unit	
	Allen E. Quillen	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefore..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1, 2, 6-8, 11-12 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 7, 11 and 12 of copending Application No. 09/715253. Claims 3-5, 9-10, 13-14 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 4, 7 and 9 of copending Application No. 09/715335. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

2. Claims 1, 2, 6-8, 11-12 are directed to the same invention as that of claims 1, 7, 11 and 12 of commonly assigned Application No. 09/715253. Claims 3-5, 9-10, 13-14 are directed to the same invention as that of claims 4, 7 and 9 of commonly assigned Application No. 09/715335. The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302), the assignee is required to state which entity is the prior inventor of the conflicting subject

matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 6-8, 11-12 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 09/715253 which has common inventors with the instant application. Claims 3-5, 9-10, 13-14 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 09/715335 which has common inventors with the instant application.

Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future patenting of the copending application.

This provisional rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application

was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacInnis, et al, U.S. Patent 6,501,480 in view of Computer Wall II, RGB Spectrum, Inc., Specifications, 950 Marina Village Parkway, Alameda, CA 94501, 9/2000, available on the world wide web at: http://www.rgb.com/Webpages/prodpgs/cwall.html

6. Regarding claim 1, representative of claims 7 and 11, MacInnis discloses a single graphical display system, comprising: an interface configured to receive graphical data defining an image; and a plurality of graphical acceleration units, each of said plurality of graphical acceleration units respectively interfaced with one of said plurality of display devices and configured to render a portion of said graphical data to said one display device such that said display displays said image as a single screen, wherein at least one of said graphical acceleration units comprises: a first graphical pipeline configured to render graphical data from said portion rendered by said at least one graphical acceleration unit; a second graphical pipeline configured to render graphical data from said portion rendered by said at least one graphical acceleration unit; and a compositor configured to interface with said one display said graphical data rendered by said first and second graphical pipelines (Column 6, lines 19-21; Column 1, lines 45-67; Column 3, lines 29-50; Column 49, lines 1-26; Figure 2, element 60, Column 5, lines 38-50; Figure 4, elements 80, 94, Figure 10, elements 140, 374; Figure 13, element 59; Column 7, lines

59-62; Column 8, lines 61-63); using a plurality of frame buffers (Column 5, line 34; Column 9, lines 1-4).

MacInnis does not disclose a single logical screen (SLS) graphical display system comprising a plurality of display devices. RGB Spectrum Specification teaches the single logical screen (SLS) graphical display system comprising a plurality of display devices (video wall, page 1, lines 4-9). The motivation for combining graphics pipeline processing and video compositing with a video wall is for high resolution imagery for large display walls used in data assessment and decision making for real-time command, control and communications and control rooms (RGB Spectrum, page 1). RGB Spectrum Specification is evidence that, at the time of the invention, it would have been obvious for someone skilled in the art of graphical and video data digital display processing to combine the benefits of interfacing, pipeline processing using multiple pipelines and video compositing, as MacInnis discloses, with multiple displays, as the RGB Spectrum Specification teaches, to provide for large video walls for data assessment and decision making.

7. Regarding claim 2, MacInnis discloses the system of claim 1, wherein: said first graphical pipeline is configured to mathematically combine a first offset with coordinate values included in said graphical data rendered by said first graphical pipeline; said second graphical pipeline is configured to mathematically combine a second offset with coordinate values included in said graphical data rendered by said second graphical pipeline; and said compositor is configured to blend color values associated with corresponding coordinate values within said graphical data rendered by said first and second graphical pipelines (see above; Figures 4,

element 84, Column 6, lines 30-45; Column 11, line 9 through Column 15, line 25; Figure 15, Column 29, lines 43 through Column 30, line 6; Column 14, lines 26-37; Figures 28- 30, Column 8, line 61 through Column 9, line 59).

8. Regarding claim 3, MacInnis discloses the system of claim 1, wherein said first graphical pipeline is configured to discard said graphical data rendered by said second graphical pipeline, and wherein said second graphical pipeline is configured to discard said graphical data rendered by said first graphical pipeline (Column 4, lines 51-55; Column 6, lines 27-29, 37-41; Column 15, lines 1-17, lines 33-49; Column 17, lines 63-67; Column 21, lines 50-53; Column 22, lines 32-39; Column 24, lines 17-25).

9. Regarding claim 4, representative of claim 13, MacInnis discloses the system of claim 3, wherein said first graphical pipeline is configured to receive an input identifying a first coordinate range and is configured to discard said graphical data rendered by said second pipeline based on said first coordinate range, and wherein said second graphical pipeline is configured to receive an input identifying a second coordinate range and is configured to discard said graphical data rendered by said first graphical pipeline based on said second coordinate range (Column 4, lines 51-55; Column 6, lines 27-29, 37-41; Column 15, lines 1-17, lines 33-49; Column 17, lines 63-67; Column 21, lines 50-53; Column 22, lines 32-39; Column 24, lines 17-25).

10. Regarding claim 5, MacInnis discloses the system of claim 3, wherein said first graphical pipeline is further configured to super sample said graphical data rendered by said first graphical pipeline, and wherein said second graphical pipeline is further configured to super sample said graphical data rendered by said second graphical pipeline (post filtering, digitized analog video capture, Column 4, lines 11-16; Column 7, lines 66 through Column 8, lines 9; Column 10, lines 25-26; Column 30, lines 43-53).

11. Regarding claim 6, MacInnis discloses the system of claim 5, wherein said compositor is configured to blend color values included in said graphical data rendered by said first and second graphical pipelines (Column 14, lines 26-37; Figures 28- 30, Column 8, line 61 through Column 9, line 59).

12. Regarding claim 8, MacInnis discloses the system of claim 7, wherein each of said plurality of pipeline means includes a means for mathematically combining a different offset to coordinate values included in said portion of said graphical data, and wherein said rendering means includes a means for blending color values associated with corresponding coordinate values within said portion of said graphical data (Figures 4, element 84, Column 6, lines 30-45; Column 11, line 9 through Column 15, line 25; Figure 15, Column 29, lines 43 through Column 30, line 6; Column 14, lines 26-37; Figures 28-30, Column 8, line 61 through Column 9, line 59).

13. Regarding claim 9, MacInnis discloses the system of claim 7, wherein said rendering means includes a means for receiving an input identifying a coordinate range, and wherein one of

said pipeline means includes a means for discarding graphical data from said graphical data portion (Column 30, lines 33-36; Figure 3, peripherals, Column 3, lines 39-41, Column 4, lines 11-16, 51-55; Column 5, lines 20-23; Column 6, lines 37-41; Column 15, lines 1-17, 33-49; Column 21, lines 51-53; Column 22, lines 32-39).

14. Regarding claim 10, representative of claim 14, MacInnis discloses the system of claim 9, wherein each of said pipeline means is configured to super sample graphical data from said graphical data portion, and wherein said rendering means includes a means for blending color values included in said super sampled graphical data (Column 14, lines 26-37; Figures 28- 30, Column 8, line 61 through Column 9, line 59; post filtering, digitized analog video capture, Column 4, lines 11-16; Column 7, lines 66 through Column 8, lines 9; Column 10, lines 25-26; Column 30, lines 43-53).

15. Regarding claim 12, MacInnis discloses the method of claim 11, wherein said rendering step further includes the steps of mathematically combining different offsets with coordinate values included in said graphical data rendered via said plurality of pipelines; and blending color values associated with corresponding coordinate values included in said graphical data rendered via said plurality of pipelines (Figures 4, element 84, Column 6, lines 30-45; Column 11, line 9 through Column 15, line 25; Figure 15, Column 29, lines 43 through Column 30, line 6; Column 14, lines 26-37; Figures 28-30, Column 8, line 61 through Column 9, line 59; Column 14, lines 26-37; Figures 28- 30, Column 8, line 61 through Column 9, line 59).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen E. Quillen whose telephone number is (703) 605-4584. The examiner can normally be reached on Tuesday – Friday, 8:30am – noon and 1:00 - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or FAX'd to:

(703) 872-9314 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Sixth Floor (Receptionist), Arlington, Virginia

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number (703) 305-9600 or (703) 305-3800.

Allen E. Quillen
Patent Examiner
Art Unit 2676

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February 7, 2003

MATTHEW C. BELLA
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